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Note to begin with:

1. Changes

Changes comment:

%%%% changes %%%

…

%%%% changes %%%

# GIBOC\_femur.m

Save femoral notch

## GIBOC\_femur\_articularsurf.m

Default post condyle parameters

switch art\_surface

case 'full\_condyles'

% Identify full articular surface of condyles (points)

% PARAMETERS

CutAngle\_Lat = 70;

CutAngle\_Med = 85;

InSetRatio = 0.8;

ellip\_dilat\_fact = 0.025;

case 'post\_condyles'

% Identify posterior part of condyles (points)

% PARAMETERS

CutAngle\_Lat = 10;

CutAngle\_Med = 25;

InSetRatio = 0.6;

ellip\_dilat\_fact = 0.025;

case 'pat\_groove'

% same as posterior

CutAngle\_Lat = 10;

CutAngle\_Med = 25;

InSetRatio = 0.6;

ellip\_dilat\_fact = 0.025;

otherwise

end

Changes:

switch art\_surface

case 'full\_condyles'

% Identify full articular surface of condyles (points)

% PARAMETERS

CutAngle\_Lat = 70;

CutAngle\_Med = 85;

InSetRatio = 0.8;

ellip\_dilat\_fact = 0.025;

%%% changes %%%

%%% quick test %%%

% PARAMETERS

CutAngle\_Lat = 70;

CutAngle\_Med = 85;

InSetRatio = 0.8;

ellip\_dilat\_fact = 0.025;

%%% changes %%%

%%% quick test %%%

case 'post\_condyles'

% Identify posterior part of condyles (points)

% PARAMETERS

CutAngle\_Lat = 10;

CutAngle\_Med = 25;

InSetRatio = 0.6;

ellip\_dilat\_fact = 0.025;

%%% changes %%%

%%% quick test %%%

% PARAMETERS

CutAngle\_Lat = 10;

CutAngle\_Med = 25;

InSetRatio = 0.9;

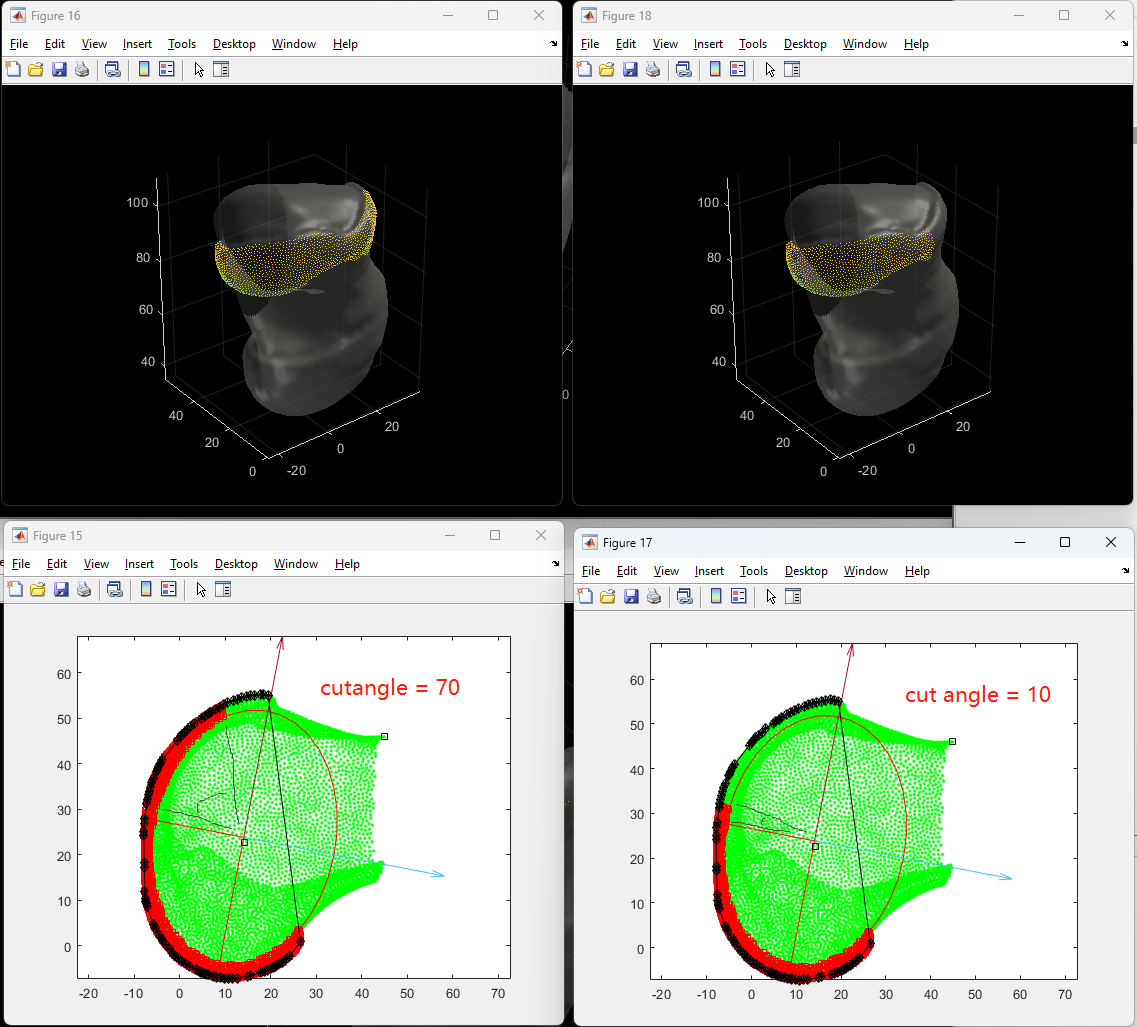
ellip\_dilat\_fact = 0.025;

%%% changes %%%

%%% quick test %%%

**Parameters**

* **CutAngle**



* **InSetRatio (0-1)** 
  + By how much the 2D ellipse shrink
  + Larger value (e.g., 0.9), less points will be selected (which means narrow art. Surf.) , the ellipse will be set to the 0.9 times the initial one.
  + Small value (e.g., 0.5), more points will be selected.
  + See picture:
  + **Chart

    Description automatically generated with low confidence**

PtsOnCondylesFemur.m

Add debug plot:

